

# W5YI

National Volunteer Examiner Coordinator

## REPORT

Up to the minute news from the world of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable. May be reproduced providing credit is given to The W5YI Report.

Fred Maia, W5YI, Editor, P.O. Box 565101, Dallas, TX 75356-5101

### ★ In This Issue ★

ARRL Files for 216-220 MHz Access  
Background on Petition  
Need for Amateur Spectrum  
Compatibility & Coordination  
Control Operator Responsibilities  
Replies Filed on RM-7649  
Amateur Radio Calls Through June 1  
Address: FCC Personal Radio Branch  
on State of Amateur Radio Service  
VEC's Meet in Annual Conference  
Codeless Tech! How's it doing?  
May VE Program Statistics  
Scanner Comments Pour in to FCC!  
...and much, much more!

Vol. 13, Issue #13

\$1.50

PUBLISHED TWICE A MONTH

July 1, 1991

## ARRL PETITIONS FOR AMATEUR 216-220 MHz ACCESS

The American Radio Relay League has filed a massive document with the FCC requesting a secondary allocation for the *Amateur Radio Service* at 216-222 MHz. ARRL contends "This allocation would provide reaccommodation for those present and future wideband data intercity links and other point-to-point fixed amateur stations which stand, by August of this year, to be displaced from the 220-222 MHz band as a result of the reallocation of that segment in Docket 87-14."

The League believes that amateurs can peacefully co-exist with present and future planned users of the band. The Commission may also have this belief since it was they who initially suggested this approach. The 216 to 220 MHz band is currently allocated to various mobile and fixed services. The ARRL petition asks that the 216-220 MHz segment only be used by amateurs for point-to-point fixed operation on a non-interference basis.

The League suggested the following Part 97 Rule changes. §97.303(e) would read: "...the segment 216-220 MHz shall be used only for point-to-point amateur fixed operation. No amateur station operating in that segment shall cause harmful interference to, nor is protected from interference from, maritime mobile stations, fixed stations, or other mobile licensees operating in the band. Nor shall harmful interference to broadcast television reception be created from operation in that band. Prior

to commencement of amateur operation in that band, amateur stations are cautioned to contact a database administrator for the Amateur Radio Service for frequency recommendations, in order to avoid interference to licensees of other services. The licensee of the amateur station must make all necessary adjustments, including termination of transmissions, if harmful interference is caused."

§97.313(d): "In the 216-220 MHz segment of the 1.25 m band, no station may transmit with a transmitter power exceeding 50 W PEP."

The *Petition for Rule Making* is well supported, professionally completed ...and very impressive. The enormous half-inch thick bound document is comprised of four sections and three exhibits. It weighs a full pound. Follows is a capsule version of the petition:

### Background

The Amateur Service has used 1.25 m spectrum since the 1930's. The service was allocated the entire 220-225 MHz segment in 1946; prior to that the Amateur Service occupied 235-240 MHz. In 1958, the amateur allocation was reduced to secondary with military use primary. WARC-79 established 220-225 MHz as "...co-primary amateur, fixed and mobile" within ITU Region 2 (North and South America.)



## National Volunteer Examiner Coordinator

July 1, 1991

The Secretary of Defense is concerned about the adverse impact on national security emergency preparedness (NSEP). The *National Communications System* (NCS) had been planning for the use of amateur communications in NSEP operations and had entered into a memorandum of understanding with the League in connection with such cooperation. "This resulted in the filing of reply comments in the proceeding in which

**WOULD YOU LIKE TO BECOME A VOLUNTEER EXAMINER?**

per [redacted] W [redacted] Rep [redacted] m? [redacted] I a [redacted] y of [redacted]  
your Extra Class license, the following signed statement, and a SASE  
station or operator license revoked or suspended., I do not own a sig-

"I am a currently licensed ☐ Advanced, ☐ Extra Class amateur radio  
operator [redacted] ppe [redacted] r an [redacted] ish [redacted] p a [redacted] 'inte [redacted] kam' [redacted] I [redacted] p ne [redacted] had [redacted]



# W5YI REPORT

National Volunteer Examiner Coordinator

the Secretary of Defense stated that: The deprivation of these types of communication resources, which would be vital in times of emergency or crisis, could significantly hamper the ability of the NCS to carry out its responsibilities in the area of national security."

"...in rejecting the more than 550 *Petitions for Reconsideration* of the Commission's reallocation of the 220-222 MHz band, the Commission stated that it would entertain a request for replacement spectrum for the Amateur Radio Service, acknowledging that in certain areas of the country, some relief was justified..."

The Commission responded to the ARRL *Petition for Reconsideration* by stating: "ARRL may, if it so chooses, submit a petition making a specific proposal. The petition would need to provide support why an allocation is needed and show how amateur operations could use this band without causing interference to existing users of this (216-220 MHz) spectrum or to adjacent channel 13 operations in the 210-216 MHz band."

"This petition is submitted of necessity in view of the imminent loss of access to the 220-222 MHz band. It is submitted in response to the Commission's invitation to do so, with the understanding that the Commission intends to seriously consider the proposal. ...Such a secondary allocation should provide some relief from the severe adverse impact on the establishment of a nationwide, high-speed packet radio network."

## Technical Compatibility

Last year, utilizing FCC-issued experimental licenses, the ARRL tested the compatibility of typical amateur 216-220 MHz operation and Channel 11 and 13 television broadcasting. Strong amateur signals, especially between 216 and 218 MHz, did affect Channel 13 reception. A minimum effect on Channel 11 was noted.

This study was conducted in order to determine the proper operating parameters for amateur radio communications in the 216-220 MHz band. Five previously-used television receivers were obtained from a consumer rental business for the analysis. No filtering was added. The test was modelled after a 1975 FCC Laboratory Division study of interference to Channels 11 and 13 from transmitters operating at 216-225 MHz.

"The test results show a rapidly diminishing interference potential as the adjacent-service signal moves from 216 MHz toward 218 MHz. ...The overall conclusion which can be drawn is that there is a potential for

interference to television channel 13 reception where the amateur radio transmitter is located in close proximity to the television receiver and where the operating frequency of the transmitter is in the 216-218 MHz range. There appears far less risk of any interference from amateur operation above 218 MHz, and, above 219 MHz, there appears little interference potential."

The League also commissioned a probe by the *Atlantic Research Corporation*. Their report (Exhibit "B") was included with the ARRL petition. The purpose of the study was to determine the potential for sharing between existing services (including IVDS systems) and the Amateur Radio Service. The study discusses interference parameters of both high-speed packet stations and amateur repeater stations, though amateur repeaters are not proposed in the ARRL 216-220 MHz petition.

"The results of the study show that there are significant sharing opportunities for fixed stations in the Amateur Radio Service at 216-220 MHz, even assuming protection criteria based on worst-case protection ratios." Under certain antenna conditions, co-channel sharing could be accomplished at distances of approximately 50 miles - more or less.

The study affirms that substantial spectrum resources would be available to the Amateur Service in the band, even if usage of the band by other services grows substantially beyond the levels shown in the study. "The amateur radio community ...will have to conduct frequency management activities in order to avoid any interference to its own, and other services', systems" the report ARC concludes.

## Amateur Coordination at 216-220 MHz.

The ARRL agreed that amateur activity at 216-220 would have to be controlled. "It would not be advisable for amateurs to be able to access the band without prior coordination with a spectrum manager or database administrator. This entity would develop and maintain a database of current assignments to other services in the band, and would determine the advisable frequency constraints to prevent interference, on a case-by-case-basis, for each planned amateur station.

"The League is willing to assume this function, and would provide advice to all amateurs desiring to initiate operations in this band, on a case-by-case basis, relative to the necessary station configurations to protect existing users. The League would also inform

wishing to upgrade ...even volunteer examiners administering  
tests for the Technician - Extra Class tests.  
license examination. Also complete  
THE W5YI GROUP  
Box 1510  
Dallas, TX 75356  
Satisfaction  
Guaranteed  
J. H. McCarty, BA, CAE  
Questions, over 300 pages! Order from: W5YI today!



# W5YI REPORT

National Volunteer Examiner Coordinator

Page #4

July 1, 1991

such amateur users of new non-amateur systems in the band, to avoid interference to those services. ...The absolute responsibility to avoid interference would be placed on the amateur radio licensee."

ARRL proposed a power limitation of fifty watts PEP, unique to the 216-220 MHz band in order to further reduce the potential for interference to stations in other services.

"...the Commission will suffer no administrative burden, nor would the licensees in other services, nor television Channel 11 or 13 users. More efficient use of the radio spectrum would be occasioned ...and the Amateur Radio Service would regain at least some of that which was lost by the reallocation of the 220-222 MHz band"

The petition contained three enclosures:

**Exhibit "A"** - ARRL Technical Dept. Laboratory analysis of "Interference to Television Channels 11 and 13 from Transmitters Operating from 216 to 220 MHz." dated: June 21, 1990.

**Exhibit "B"** - Atlantic Research Corp. study "Compatibility Assessment of the Amateur Service in the 216-220 MHz Band" dated: April 10, 1991.

**Exhibit "C"** - suggested wording of amendments to Part §2 and §97 of the Commission's Rules.

(Filed 6/4/91, By Christopher D. Imlay/N3AKD, ARRL Counsel)

## REPLY COMMENTS FILED ON RM-7649 REQUESTING Two Levels of Control Operator Responsibility

Tom Blackwell/N5GAR and Joe Jarrett/K5FOG have filed reply comments with the FCC on their petition which seeks to add subparagraph "g" to §97.205. This would hold the originator of a prohibited communication primarily responsible for automatic retransmission, with the licensee of a repeater (or packet digipeater) having secondary responsibility. The new paragraph "g" does not eliminate a trustee's (or intermediary packet station's) responsibility for insuring proper station operation. It is intended as protection from blame for those instantaneous retransmitted operations over which the repeater owner has no effective control.

They agreed with the *Motor City Radio Club* that strict enforcement of the present rules can lead to the closing down of repeaters because licensees do not want to be held responsible for things over which they do not have complete control.

The Texas VHF Society, Wayne Green/W2NSD/1, the Bexar Emergency Amateur Repeater System, and ...dozens of other amateurs all supported RM-7649's intent.

## AMATEUR RADIO CALL SIGNS

...issued as of the first of June 1991:

Radio District	Gp. "A" Extra	Gp. "B" Advan.	Gp. "C" Tech/Gen	Gp. "D" Novice
0 (*)	AA0EV	KF0SC	N0OCF	KB0JFJ
1	WS1X	KD1BQ	N1JGE	KA1YYC
2 (*)	AA2ET	KF2CD	N2MQY	KB2NAI
3	WN3U	KD3XH	N3JRF	KA3ZCI
4 (*)	AC4GC	KO4CL	(***)	KD4GBU
5 (*)	AA5YO	KI5QR	N5TXE	KB5PWB
6 (*)	AB6DC	KM6BX	(***)	KC6VVV
7 (*)	AA7IS	KG7PV	N7SBC	KB7NSV
8 (*)	AA8DZ	KF8NV	N8OSW	KB8MQY
9	AA9AX	KF9DT	N9LPE	KB9GYD
N. Mariana Is.	AH0K	AH0AH	KH0AN	WH0AAQ
Guam	KH2R	AH2CK	KH2FF	WH2AMU
Johnston Is.	AH3D	AH3AD	KH3AG	WH3AAG
Midway Is.		AH4AA	KH4AG	WH4AAH
Hawaii	(**)	AH6LH	WH6AD	WH6CMX
Kure Is.			KH7AA	
Amer. Samoa	AH8D	AH8AE	KH8AI	WH8ABA
Wake W. Peale	AH9A	AH9AD	KH9AE	WH9AAH
Alaska	(**)	AL7NE	NL7XO	WL7CCL
Virgin Is.	NP2P	KP2BY	NP2EF	WP2AHJ
Puerto Rico	(**)	KP4SB	(***)	WP4KBV

**CALL SIGN WATCH:** \*=All Group A (2-by-1) "W" prefixed call signs have been assigned in all but the 1st and 3rd contiguous U.S. amateur radio districts. 2-by-2 format call signs from the AA-AK block are assigned to Extra Class amateurs when all 2-by-1's are used up.

\*\*=All Group A (2-by-1) format call signs have been assigned in Hawaii, Alaska and Puerto Rico. Group "B" (2-by-2) format call signs are assigned to Extra Class when Group "A" are depleted.

\*\*\*=Group "C" (1-by-3) call signs have now run out in the 4th, 6th and Puerto Rico call districts. According to the rules (adopted by the Commission Feb. 8, 1978, Docket No. 21135), Technician/General class amateurs are next assigned Group "D" (2-by-3 format) call signs when all Group "C" have been assigned.

Upgrading Novices holding a 2-by-3 format call sign in the 4th, 6th and Puerto Rico call areas will no longer be able to request a Group "C" call and will be automatically assigned another more recent 2-by-3 format call sign if they do! The FCC has said they will not be going back and re-assigning unused "K" and "W" 1-by-3 format call signs.

[Source: FCC, Gettysburg, Pennsylvania]

HAM LICENSE PREPARATION SOFTWARE - Take sample ham radio tests & quizzes for IL, Jomf, le kt, y, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 2681, 2682, 2683, 2684, 2685, 2686, 2687, 2688, 2689, 2690, 2691, 2692, 2693, 2694, 2695, 2696, 2697, 2698, 2699, 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2713, 2714, 2715, 2716, 2717, 2718, 2719, 2720, 2721, 2722, 2723, 2724, 2725, 2726, 2727, 2728, 2729, 2730, 2731, 2732, 2733, 2734, 2735, 2736, 2737, 2738, 2739, 2740, 2741, 2742, 2743, 2744, 2745, 2746, 2747, 2748, 2749, 2750, 2751, 2752, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2768, 2769, 2770, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787, 2788, 2789, 2790, 2791, 2792, 2793, 2794, 2795, 2796, 2797, 2798, 2799, 2800, 2801, 2802, 2803, 2804, 2805, 2806, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2816, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2824, 2825, 2826, 2827, 2828, 2829, 2830, 2831, 2832, 2833, 2834, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2842, 2843, 2844, 2845, 2846, 2847, 2848, 2849, 2850, 2851, 2852, 2853, 2854, 2855, 2856, 2857, 2858, 2859, 2860, 2861, 2862, 2863, 2864, 2865, 2866, 2867, 2868, 2869, 2870, 2871, 2872, 2873, 2874, 2875, 2876, 2877, 2878, 2879, 2880, 2881, 2882, 2883, 2884, 2885, 2886, 2887, 2888, 2889, 2890, 2891, 2892, 2893, 2894, 2895, 2896, 2897, 2898, 2899, 2900, 2901, 2902, 2903, 2904, 2905, 2906, 2907, 2908, 2909, 2910, 2911, 2912, 2913, 2914, 2915, 2916, 2917, 2918, 2919, 2920, 2921, 2922, 2923, 2924, 2925, 2926, 2927, 2928, 2929, 2930, 2931, 2932, 2933, 2934, 2935, 2936, 2937, 2938, 2939, 2940, 2941, 2942, 2943, 2944, 2945, 2946, 2947, 2948, 2949, 2950, 2951, 2952, 2953, 2954, 2955, 2956, 2957, 2958, 2959, 2960, 2961, 2962, 2963, 2964, 2965, 2966, 2967, 2968, 2969, 2970, 2971, 2972, 2973, 2974, 2975, 2976, 2977, 2978, 2979, 2980, 2981, 2982, 2983, 2984, 2985, 2986, 2987, 2988, 2989, 2990, 2991, 2992, 2993, 2994, 2995, 2996, 2997, 2998, 2999, 3000, 3001, 3002, 3003, 3004, 3005, 3006, 3007, 3008, 3009, 3010, 3011, 3012, 3013, 3014, 3015, 3016, 3017, 3018, 3019, 3020, 3021, 3022, 3023, 3024, 3025, 3026, 3027, 3028, 3029, 3030, 3031, 3032, 3033, 3034, 3035, 3036, 3037, 3038, 3039, 3040, 3041, 3042, 3043, 3044, 3045, 3046, 3047, 3048, 3049, 3050, 3051, 3052, 3053, 3054, 3055, 3056, 3057, 3058, 3059, 3060, 3061, 3062, 3063, 3064, 3065, 3066, 3067, 3068, 3069, 3070, 3071, 3072, 3073, 3074, 3075, 3076, 3077, 3078, 3079, 3080, 3081, 3082, 3083, 3084, 3085, 3086, 3087, 3088, 3089, 3090, 3091, 3092, 3093, 3094, 3095, 3096, 3097, 3098, 3099, 3100, 3101, 3102, 3103, 3104, 3105, 3106, 3107, 3108, 3109, 3110, 3111, 3112, 3113, 3114, 3115, 3116, 3117, 3118, 3119, 3120, 3121, 3122, 3123, 3124, 3125, 3126, 3127, 3128, 3129, 3130, 3131, 3132, 3133, 3134, 3135, 3136, 3137, 3138, 3139, 3140, 3141, 3142, 3143, 3144, 3145, 3146, 3147, 3148, 3149, 3150, 3151, 3152, 3153, 3154, 3155, 3156, 3157, 3158, 3159, 3160, 3161, 3162, 3163, 3164, 3165, 3166, 3167, 3168, 3169, 3170, 3171, 3172, 3173, 3174, 3175, 3176, 3177, 3178, 3179, 3180, 3181, 3182, 3183, 3184, 3185, 3186, 3187, 3188, 3189, 3190, 3191, 3192, 3193, 3194, 3195, 3196, 3197, 3198, 3199, 3200, 3201, 3202, 3203, 3204, 3205, 3206, 3207, 3208, 3209, 3210, 3211, 3212, 3213, 3214, 3215, 3216, 3217, 3218, 3219, 3220, 3221, 3222, 3223, 3224, 3225, 3226, 3227, 3228, 3229, 3230, 3231, 3232, 3233, 3234, 3235, 3236, 3237, 3238, 3239, 3240, 3241, 3242, 3243, 3244, 3245, 3246, 3247, 3248, 3249, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3283, 3284, 3285, 3286, 3287, 3288, 3289, 3290, 3291, 3292, 3293, 3294, 3295, 3296, 3297, 3298, 3299, 3300, 3301, 3302, 3303, 3304, 3305, 3306, 3307, 3308, 3309, 3310, 3311, 3312, 3313, 3314, 3315, 3316, 3317, 3318, 3319, 3320, 3321, 3322, 3323, 3324, 3325, 3326, 3327, 3328, 3329, 3330, 3331, 3332, 3333, 3334, 3335, 3336, 3337, 3338, 3339, 3340, 3341, 3342, 3343, 3344, 3345, 3346, 3347, 3348, 3349, 3350, 3351, 3352, 3353, 3354, 3355, 3356, 3357, 3358, 3359, 3360, 3361, 3362, 3363, 3364, 3365, 3366, 3367, 3368, 3369, 3370, 3371, 3372, 3373, 3374, 3375, 3376, 3377, 3378, 3379, 3380, 3381, 3382, 3383, 3384, 3385, 3386, 3387, 3388, 3389, 3390, 3391, 3392, 3393, 3394, 3395, 3396, 3397, 3398, 3399, 3400, 3401, 3402, 3403, 3404, 3405, 3406, 3407, 3408, 3409, 3410, 3411, 3412, 3413, 3414, 3415, 3416, 3417, 3418, 3419, 3420, 3421, 3422, 3423, 3424, 3425, 3426, 3427, 3428, 3429, 3430, 3431, 3432, 3433, 3434, 3435, 3436, 3437, 3438, 3439, 3440, 3441, 3442, 3443, 3444, 3445, 3446, 3447, 3448, 3449, 3450, 3451, 3452, 3453, 3454, 3455, 3456, 3457, 3458, 3459, 3460, 3461, 3462, 3463, 3464, 3465, 3466, 3467, 3468, 3469, 3470, 3471, 3472, 3473, 3474, 3475, 3476, 3477, 3478, 3479, 3480, 3481, 3482, 3483, 3484, 3485, 3486, 3487, 3488, 3489, 3490, 3491, 3492, 3493, 3494, 3495, 3496, 3497, 3498, 3499, 3500, 3501, 3502, 3503, 3504, 3505, 3506, 3507, 3508, 3509, 3510, 3511, 3512, 3513, 3



# W5YI REPORT

National Volunteer Examiner Coordinator

Page #5

July 1, 1991

## FCC PERSONAL RADIO BRANCH CHIEF ADDRESSES ARMED FORCES COMMUNICATIONS CONVENTION

The following is the text of a speech that **John B. Johnston/W3BE** gave at the Amateur Operator luncheon of the *45th International Convention and Database Colloquium of the Armed Forces Communications and Electronics Association*. The AFCEA meeting was held on June 5th in Washington, D.C. Johnny Johnston is Chief of the FCC's Personal Radio Branch. His remarks are interesting in that they give us insight on the adoption, implementation and early results of the new Codeless Technician operator class.

"Good Afternoon. This time last year, we were in the midst of the codeless operator license matter. Unless you've been in a coma over the past six months, you know that there has been a decision on that. The codeless proceeding had a number of surprises.

"The first eye-opener was the relatively small number of comments... eleven-hundred. That was a lot of comments to read, but there were five times as many comments filed in 1983 on the same matter.

"Also in 1983, the comments ran 20 to 1 against a codeless license. This time it was 7 to 3 for a codeless class. That difference and the things that were said in those comments indicated that the amateur community is undergoing a dramatic shift in sentiment concerning the value of Morse code as an entry level license requirement.

"Another discovery was having to drop the Communicator class approach, leaving no choice but to convert either the Novice or the Technician class of license to codeless. Your comments were strongly against any changes to the Novice, so that left only the Technician. The Codeless Technician is not quite as tidy as we all might have liked, but it was the practical thing to do.

"When the licensing people in Gettysburg looked further into activating the Communicator part of their computer program, they found that it would be too expensive and take too long.

"It might be nicer if there did not have to be another variation of the Technician Class, but that is something we can live with and something that the VEC's and VE's, and the auxiliary monitors, have lived with. The bottom line, moreover, is that you have a meaningful codeless class at long last.

"The biggest shock of all, however, was that the

approach finally selected came from none other than the *Quarter Century Wireless Association!* QCWA's suggestion was very critical in this proceeding because the Codeless Technician is very similar to the approach that the Commission proposed and the amateur community soundly rejected in 1983. The main difference is that the 1983 proposal called for a 70 question written examination, rather than the current 55 questions.

"So with the Communicator being unavailable, had it not been for QCWA's suggestion already being there in the official record of the proceeding, there might have been a lengthy delay... possible even a Further Notice of Proposed Rule Making.

"Keeping the Novice was the toughest part. The plan was to pay for processing your codeless licenses by reprogramming the labor that goes into processing Novice licenses. But there was a very widespread demand to retain the Novice class expressly for people who cannot pass your 25 question written exam for the Technician, but who can pass your 5 words-per-minute code test.

"The FCC does not foresee that our country's future systems will need telegraphers as much as they will need technicians and engineers. You, however, did not agree. You may be right. Possibly you know something we don't. After this meeting, we are going to tour the AFCEA exhibits. We will be looking for all those new systems that require telegraphers.

"You did not give a good response to our question asking you to tell us how many newcomers would choose Novice over Technician. A few said it would be about 50-50.

"When we learned that the Commissioners had set the handicap matter for a formal presentation at their December 13 meeting, we asked if we could speed up the codeless matter and include it on the same agenda.

"After obtaining the go-ahead, we began to think about the best way to do it. Four of the five Commissioners, and their staffs, are relatively new to the Commission.

"Bob (McNamara, FCC Special Services Division Chief) suggested that we use our few precious minutes to make the case for the amateur service. Many of the amateur matters that initially came to the attention of the Commissioners and their staffs have been very uncomplimentary to you... Complaints of jamming,



# W5YI REPORT

National Volunteer Examiner Coordinator

Page #6

July 1, 1991

interference, broadcasting, and illegal international third party communications. They have been bombarded with frequency arguments, channel use squabbles, special call sign requests, and on and on...

"We had not had an opportunity to tell them about how great you are. So, rather than rehashing the details of the codeless license, which they already knew about, we decided to use your time in the spotlight to explain to them why the amateur service is important and why you are worth the problems you bring to them.

"The presentation drew the full attention of the audience... more so than any rule making we've presented previously. It was not only carefully heard by the Commissioners, it was noticed by staff from other Bureaus. After the meeting, some of them told us they had never before quite thought of the amateur service in the way it was presented.

"I am going to repeat that presentation for you now. First let me set the stage. The place is the Commission Meeting Room at 1919 M Street, Northwest. The Commissioners are on the dias. The TV cameras are rolling. The reporters are editing their notes. The meeting room is full.

"Most of those in the audience, however, are not there for Codeless Amateur. They are there for the mass media and common carrier items. I suspect most of them are annoyed for having to sit through another one of those amateur Morse code things while waiting for the important items.

"Ralph Haller (N4RH), our Bureau Chief, starts off by holding up my two-meter handi-talky as evidence that hams do use their frequencies for communications other than telegraphy. Commission Quello asks if amateurs actually still use telegraphy to any extent. Ralph replied that you still do, but also other emission types.

[At this point, Johnston repeated the presentation to the FCC Commissioners given by Personal Radio Branch staffer Bill Cross on December 13th. We covered this verbatim in our January 1st W5YI Report, so we won't do it again.]

"During the presentation, the room became as silent as I've ever heard it. Here you had a room full of commercial communications interests being told how the amateur service is benefitting them. Commissioner Duggan thanked Bill for providing them with a better insight as to the role played by amateur radio.

"I've noticed from the letters we have received and from the heated discussions on your bulletin boards that there remains in the amateur community those who are unconvinced that a codeless license is in the best interests of the amateur service.

"Some of these arguments, at least, begin by misstating the objective of the codeless license. They claim it is to increase the number of amateur operators.

"That is, however, not an objective in and of itself. In fact, objective three in the proceeding precluded large increases in the number of operators. It was to avoid negative effects upon current licensees, upon the work of the volunteer examiners, and upon the Commission's workload.

"Objective two was that the codeless license be implemented promptly. That was accomplished.

"The number one objective was and is to offer an entry level license opportunity to otherwise qualified persons who find a telegraphy requirement an unnecessary barrier to pursuing the purpose of the amateur service.

"So how is it going? The short answer is that it has stimulated a lot of new and renewed interest in the amateur service. We are hearing some very interesting explanations. One is that many more XYLs are becoming amateur operators.

"The theme we hear most often, however, is that after years of procrastinating over learning the code, a high tech person finally takes that critical first step by getting the codeless Tech. Immediately upon passing, he rushes to the nearest Hamfest and buys every code training aid in sight. It just might turn out that the effectiveness of CW will become so much more appreciated that it will be able to stand on its own merits.

"As a point of reference, during Fiscal 1990, the number of new amateur operators averaged 2,315 per month. For this past April, it was 5,749 ...an increase of 148%. For May it dropped off to an increase of only 103% over last year.

"Yes, the Technician led the way with a 1,238% increase in April and 1,164% in May. But Novice is also up 14%. And so are all the other classes. Those taking their first license at the General level is up 28%. New Advanced is up 27%. Ten people even took the Amateur Extra as their first license.



# W5YI REPORT

National Volunteer Examiner Coordinator

Page #7

July 1, 1991

"Something very positive is happening here. The codeless license must be reminding a lot of people that they had always intended to get a ham license some day. It must also be reminding those already in the amateur community of their own license class situations. The number of Novices upgrading to higher classes is up 9%. The number of Technicians upgrading is up 24%.

"We will be attending the annual conference of VECs the Friday after next, and we look forward to learning about their experiences with the new codeless Tech license class.

"Yet another fascinating chapter in the history of amateur radio is unfolding before our very eyes. There are going to be major changes in the service. New people, new ideas, new technology, new systems, new opportunities ...and new challenges. An that, ladies and gentlemen, is why there is an amateur service.

"Thank you, have a good convention, 73, and SK.

## VEC's MEET IN ANNUAL CONFERENCE

On June 21, Volunteer Examiner Coordinators (VEC's) representing nearly 95% of all Amateur Radio testing converged on Gettysburg, Pennsylvania, for their *Seventh Annual Conference*. Also in attendance were many officials from the FCC's Washington, D.C. headquarters and the Gettysburg, PA licensing facility.

After an introduction of those in attendance, **John B. Johnston, W3BE**, Chief of the FCC's Personal Radio Branch painted a glowing picture of the present state of Amateur Radio. His remarks pretty much followed the address he gave at the AFCEA Convention. On the next page we show three of the many overhead transparencies he used in his presentation.

There were four important agenda items for the VEC's to consider at the conference. **Ray Adams, N4BAQ**, of the *Western Carolina Amateur Radio Society-VEC* chaired the Question Pool Committee (QPC) debate on future revision dates of the questions.

It was decided that new questions for the Novice and Technician (Element 2 and 3A) would next be implemented on July 1, 1993. Deliberation, which involves suggestions from the amateur community, will begin at once. The new Novice and Technician question pools will be completed by the QPC on December 1, 1992. All question pools will have a four year life (or less if rule changes require earlier revision.)

**R. C. Smith, W6RZA** of the Greater Los Angeles Amateur Radio Group, introduced a consensus "*Instructions to VEC's*." These are the guidelines under which all coordinators operate.

**Don Tunstill, WB4HOK** presented a status report on VEC maintenance of the *Technician Plus Data Base*. It was agreed to postpone a decision on future handling of the database ...also whether or not the VEC's should be incorporated.

## MAY VE PROGRAM STATISTICS

May	1989	1990	1991
No. VEC's	*18	*18	*18

<u>Testing Sessions</u>	520	572	945
<u>VEC</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
ARRL	39.6%	42.5%	48.7%
W5YI	36.2	37.9	35.7
CAVEC	6.7	5.6	4.8
DeVRY	4.6	3.7	3.6
Others (14)	12.9	10.3	7.2
<u>Year-to-Date Sessions</u>	2247	2561	3144

<u>Elements Administ.</u>	10440	10840	22940
<u>VEC</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
ARRL	41.1%	48.9%	55.6%
W5YI	31.9	31.3	29.3
CAVEC	9.4	5.3	4.8
DeVRY	3.2	2.6	2.5
Others (14)	13.6	11.9	7.8
<u>Year-to-Date Elements</u>	43073	47846	70932

<u>Applicants Tested</u>	6169	6686	13819
<u>VEC</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
ARRL	41.8%	48.4%	55.4%
W5YI	31.1	31.4	31.6
CAVEC	8.8	5.1	4.0
DeVRY	3.4	3.0	2.7
Others (14)	14.9	12.1	6.3
<u>Year-to-Date Tested</u>	25493	28928	42412

<u>May</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
Pass Rate - All	62.1%	60.5%	66.5%
Applicants/Session	11.9	11.7	14.6
Elements/Applicant	1.7	1.6	1.7
Sessions Per VEC	28.9 (*)	31.8	52.5

## Administrative Errors by VE's/VEC's

<u>May</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
Defect. Applications	0.4%	0.7%	0.7%
Late Filed Sessions	0.8%	0.2%	1.5%
Defective Reports	2.3%	0.2%	0.5%

[Source: Personal Radio Branch/FCC; Washington, D.C.]

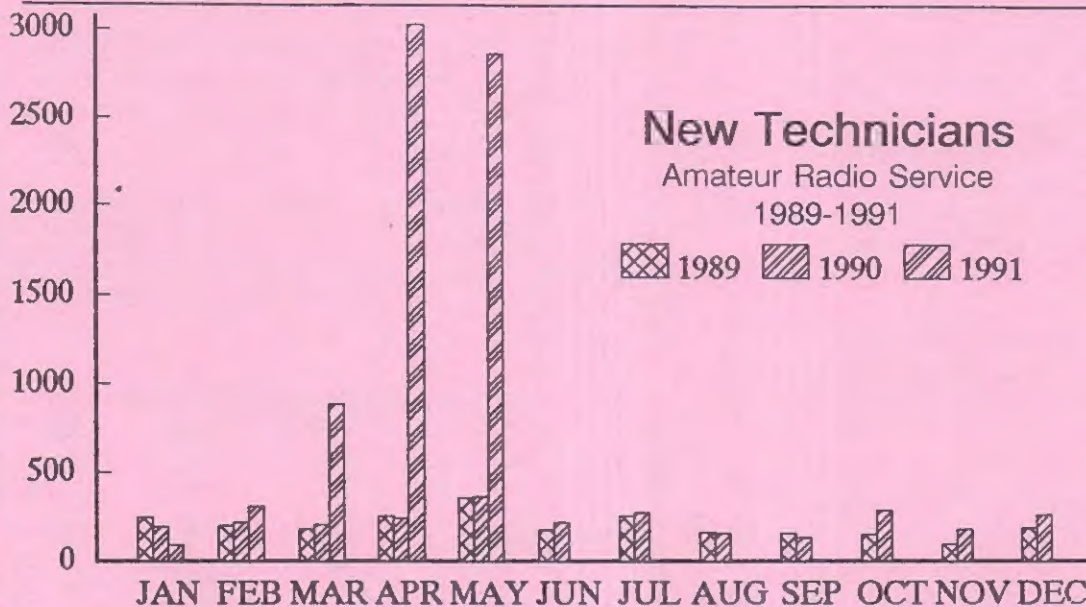


# W5YI REPORT

National Volunteer Examiner Coordinator

Page #8

July 1, 1991

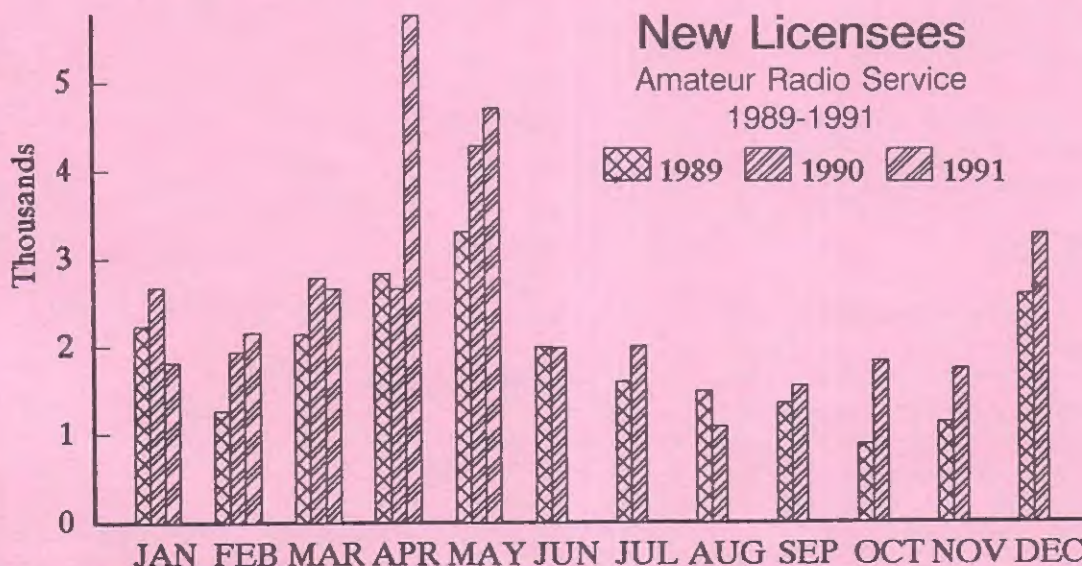
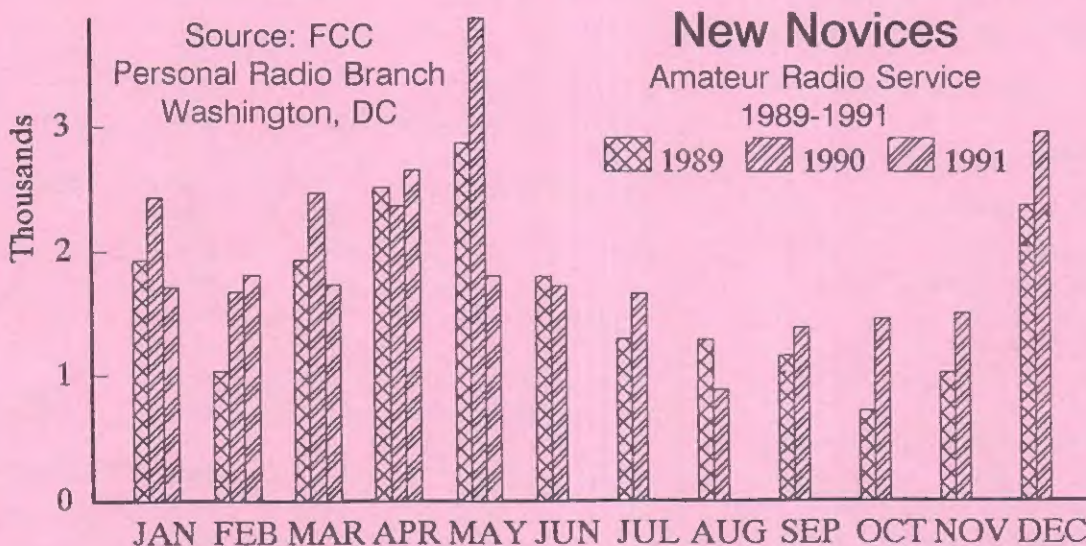


During Fiscal Year 1989 there was an average of 208 new Technicians per month; in FY-1990, 218. The first **Codeless Technician** license was issued on March 12, 1991. Since then the number of new Technicians has skyrocketed by more than ten times the previous monthly average.

There was more than a 50% increase in the number of examination elements administered in March and April 1991 versus a year ago. May 1991 saw more than double the number of applicants tested and exam elements administered. VE's, VEC's and the FCC have indeed been very busy keeping up!

While the number of new Novices increased 14% in April 1991, there are substantially less new examinees joining the ranks at the Novice level than a year ago. Note the drastic reduction in May 1991 new Novice operators vs. 1990 and 1989. It is apparent that most applicants are choosing the Codeless Technician route to enter ham radio!

Last year an average of 2,315 applicants a month joined the ham ranks for the first time. (1,922 in FY-1989.) During the past 60 days over 10,000 ham operators got their initial license. And more examinees are passing the tests! The pass rate has jumped by 6% (66% vs. 60%) since February 14, 1991.



The Radio Amateur's LICENSING HANDBOOK is for everyone who gets involved in ham licenses... it's for new-hams who want to know about amateur radio license tests, amateurs...

NEW!

ORDER FROM:

Only \$9.95 plus \$2.00 shipping charge

multiple choices and answers in every...



# W5YI REPORT

National Volunteer Examiner Coordinator

Page #9

July 1, 1991

● Kenwood has a new **TM-741A Modular FM Transceiver** that allows you to add a third band to the already installed 144 and 450 MHz dual bands. You simply plug in a 28, 50, 220 or 1200 MHz module. It was on display at the Dayton HamVention, but was not offered for sale since FCC Type Acceptance is pending. The transceiver has all the "bells and whistles" such as 100 memories per band, cross band repeat feature, scanning function, ...and more. List price is \$849.95, but street price will be much less.

## SCANNER COMMENTS: FAST AND FURIOUS

The FCC has received dozens of comments from amateurs on its *Notice of Inquiry* (PR Docket 91-36) on preemption of local and state scanner laws. We're really pleased at the great turnout and the high quality of the comments filed by hams from all walks of life. GMRS users filed many comments explaining why they should also be exempted from the onerous laws. (July 8 is the deadline for reply comments.)

Missing from the docket is much in the way of comments from state and local governments in support of the scanner laws. It looks like only one state -- Michigan -- believes amateurs should *not* be exempted from laws that prohibit scanners. Even the Associated Public-Safety Communications Officers (APCO) -- the respected league of law enforcement communications chiefs -- favors the ARRL request to exempt hams.

Also missing is substantial input from radio manufacturers about the costs and feasibility of modifying current equipment so that it will not receive public-safety radio services. This input was requested by FCC Commissioner Sherrie Marshall last February.

The commenters tell their own story in the following quotations. We hope the FCC will listen closely to the words of hams and others who want to use legal receivers without harassment.

"I have been stopped and questioned about hand-carried units. In one case, an agency used a radio model similar to the model I use. Two detectives from the agency confined me in a detention room and confiscated the radio. Not used to having personal property confiscated by law enforcement officers, I did not know to ask for an official property receipt and could have lost the unit.

"The radio was sent to the agency's communications center for evaluation and I was without it for about two weeks. If a local law prohibiting police monitor receivers

existed, I feel certain that my entirely legitimate, licensed radios would be lost or damaged in just such an occurrence -- even though they do not monitor police frequencies."

- Jon Cereghino, GMRS licensee, Mountain View, CA

"We can see no beneficial need for amateur radio equipment to tune into public safety bands. The industry has successfully and without hardship blocked the cellular telephone channels from 800 MHz scanning monitor receivers in response to Federal regulations. Therefore, there should be no problem blocking public safety bands from amateur equipment thus eliminating the risk to amateur licensees for arrest under scanner laws and the need for their exemption from prosecution."

- David Held, Michigan State Police

"Today seven states prohibit the mere possession and/or use of a VHF-UHF radio in an automobile because some people might use the radio to obstruct police operations. What if tomorrow these states decide to ban radios that carry shortwave? (New Jersey's statute already purports to do that.) Then they might really decide to do their constituents a favor and ban television. Where does the Commission draw the line?

"Once states are allowed to usurp federal power, even for what they see as legitimate purposes, we start down a slippery slope. The Commission must act to assure that law-abiding Americans in all 50 states (not just 43 states) have the right to listen to the radio waves which are in the air in their neighborhoods."

- Frank Terranella/N2IGO, Association of North American Radio Clubs, Clifton, NJ

"It is certain that laws alone will not prevent those with criminal intent from the use of a device which may assist them in carrying out that intent. Although it is possible, and even probable, that there have been instances in which an amateur radio operator has abused or misused the capability of receiving public safety communications, APCO is convinced that these are very few and are far offset by the service rendered to public safety by the amateur society. Protection from undue prosecution should be afforded to this special group."

- Robert Tall, Associated Public Safety Communications Officers Inc., South Daytona, FL

"Any preemption which is limited just to amateur radio would be a gross disservice to the GMRS community. ...A lack of meaningful FCC action would continue to



expose GMRS licensees to a patchwork of inconsistent and ill-informed local regulations which forbid or inhibit licensees from using their federally granted authority to operate."

- Corwin Moore Jr./WB8UPM, *Personal Radio Steering Group Inc.*, Ann Arbor, MI

"[T]here is a public interest in having amateurs able to receive on frequencies outside of the amateur band.

...State laws forbidding reception outside of the amateur band could have a deleterious effect on amateur operations that now provide public interest benefits.

...The Commission should carefully consider the implications of scanner laws on matters of significance to National Security/Emergency Preparedness interests."

- Paul Schwedler, Carl Smith, *U.S. National Communications System*, Arlington, VA

"It is not enough for the Commission to address this issue only in terms of its licensees or of equipment capabilities, because all of the members of RCMA have as much right to listen to their radios as those who are licensed amateurs."

- Jorge Rodriguez, *Radio Communications Monitoring Association*, Silverado, CA

"As a ham and an elected official, I have become actively involved with efforts in the state of New Jersey to change the existing NJ statute which the FCC highlights as being representative of the statutes the ARRL is asking the FCC to preempt. Unfortunately, the lobbying power of the police associations have effectively thwarted any change to the New Jersey statute.

". . .The existing NJ statute places anyone with extended receive radio equipment in their automobile in an unlawful situation. This in my opinion as a local legislator, is not the way the laws of any municipality or state should be written."

- William Sohl/K2UNK, *Councilman*, Mount Olive Township, Budd Lake, NJ

"At least one member was stopped for a 'road check' and was asked to explain the amateur radio equipment he had installed in his vehicle to the police officer.

Despite the lack of adverse incidents, the BPARA members know that most of their mobile equipment is in technical violation of the statute and that they are therefore vulnerable to arrest at the whim of the officer whom they may encounter."

- Ludwell Sibley/KB2EVN, *Belcore Pioneers Amateur Radio Assn.*, Morristown, NJ

"It is only a few states and municipalities which have

enacted, and which enforce, statutes or ordinances which prohibit the mere possession by Federal licensees of amateur equipment capable of extended reception. Accordingly, there is no basis whatsoever for the Commission to consider the retroactive engineering of amateur equipment nationally to conform to those overbroad statutes.

"To restrict the reception capability of amateur radio equipment to amateur band coverage would be both damaging to the emergency communications service provided by radio amateurs, and an unjustified restriction in view of the absence of any basis for the overbreadth of the state and local restrictions."

- Chris Imlay/N3AKD, *American Radio Relay League*, Newington, CT

"[I] eventually chose to just ignore the New Jersey law and carried a portable scanner with me in the car. I needed the scanner to fully perform my job as a reporter/photographer. Furthermore, I was probably also violating the law simply by transporting and using my legally licensed amateur radio equipment, and I wasn't about to stop doing that.

"I believe in obeying the law and do not violate any law intentionally without extremely good reason. In this case, I chose to break the law with the full realization that

- (1) it was an impossible law to enforce,
- (2) the law itself was probably illegal and unconstitutional and in violation of FCC rules and regulations, and
- (3) if I were to get caught (I never was), I was fully prepared to carry my case as far as necessary to invalidate the law, basing my case on freedom of information, freedom of the press and other constitutional arguments as well as on the argument that the law was an illegal usurpation by a state of the prerogatives of a federal regulatory agency, the FCC.

". . .A much easier way, of course, would be for the FCC to step in and assert its authority where it has the right to do so. Not just for amateurs. Also for GMRS operators (of which I am also one), journalists, public safety volunteers, grandmothers, housewives, expectant fathers, savings and loan executives, rock stars, soldiers returning from the Persian Gulf, spouses of FCC personnel, talk-show hosts and every other law-abiding citizen. This FCC preemptive action should permit every law-abiding citizen the right to listen to every unencrypted communication at any place and at any time."

- Stuart Crump Jr./N4EGX, Herndon, VA